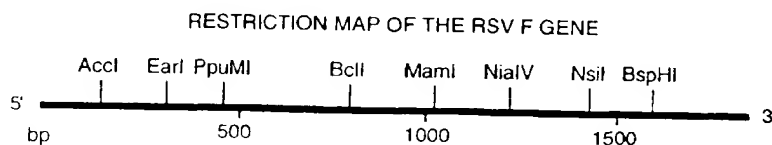




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(54) Title: NUCLEIC ACID RESPIRATORY SYNCYTIAL VIRUS VACCINES



(57) Abstract

Non-replicating vectors containing a nucleotide sequence coding for an F protein of respiratory syncytial virus (RSV) and a promoter for such sequence, preferably a cytomegalovirus promoter, are described for *in vivo* immunization. The nucleotide sequence encoding the RSV F protein lacks a sequence encoding the homologous signal peptide but possesses a heterologous signal peptide enhancing RSV F protein expression. Such non-replicating vectors, including plasmids, also may contain a further nucleotide sequence located adjacent to the RSV F protein encoding sequence to enhance the immunoprotective ability of the RSV F protein when expressed *in vivo*. Such non-replicating vectors may be used to immunize a host against disease caused by infection with RSV, including a human host, by administration thereto, and may be formulated as immunogenic compositions with pharmaceutically-acceptable carriers for such purpose. Such vectors also may be used to produce antibodies for detection of RSV infection in a sample.

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